A Model Selection Approach to Interference

Appendix

Gustavo Diaz[*]

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A. Extended Frequentist Lasso Results

Figure A1 shows the corresponding lasso coefficients at the corresponding value of λ, which informs model selection for both the lasso and lasso + OLS. Figure A2 shows the coefficients along λ for the adaptive lasso. The blue area indicates the range between the value of λ that minimizes root mean squared error (RMSE) and λ with RMSE within one standard deviation from it. As the coefficients converge towards zero, the interpretation is to exclude them from the estimation step. See the main text for further details.

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[*]Postdoctoral Fellow. Center for Inter-American Policy and Research. Tulane University. E-mail: gustavodiaz@tulane.edu
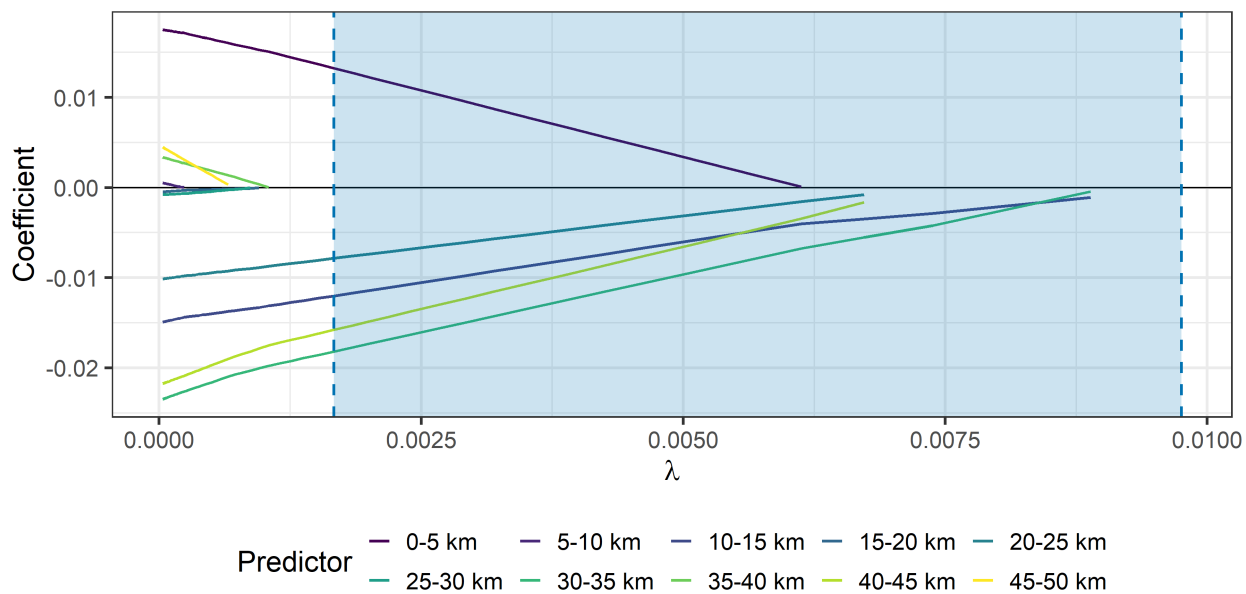
Figure A1: Lasso fit along λ

Note: Colors denote the different predictors. The blue area denotes the values of λ with RMSE within one standard deviation of the minimum, which is the leftmost vertical dashed line. As coefficients converge to zero, the interpretation is to exclude them from estimation.
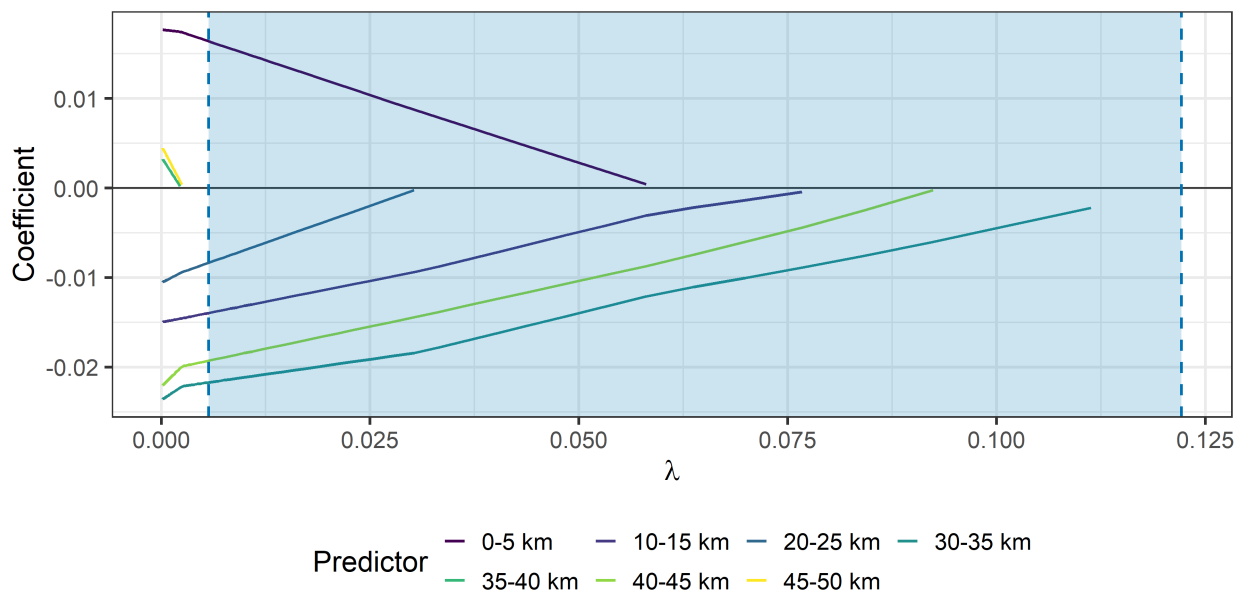
Figure A2: Adaptive lasso fit along λ

Note: Colors denote the different predictors. The blue area denotes the values of λ with RMSE within one standard deviation of the minimum, which is the leftmost vertical dashed line. As coefficients converge to zero, the interpretation is to exclude them from estimation. Predictors not displayed have a coefficient of zero throughout the values of λ.

B. Extended Simulation Results

Figures B1-B4 show simulations results with $\tau = 0.26$. Figures B5-B8 do so for $\tau = 0.63$ The interpretation of the simulation results is the same as in the main text.
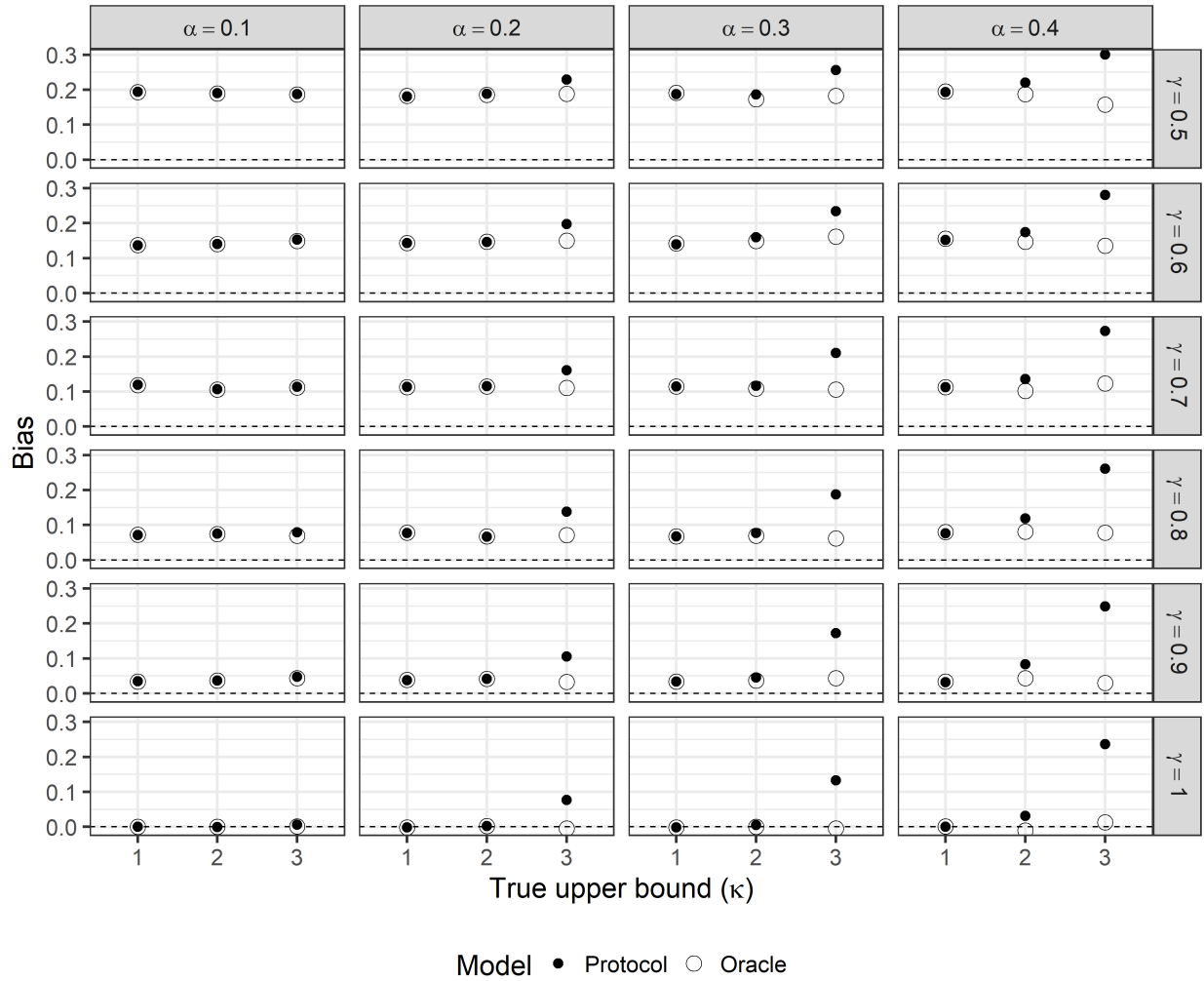
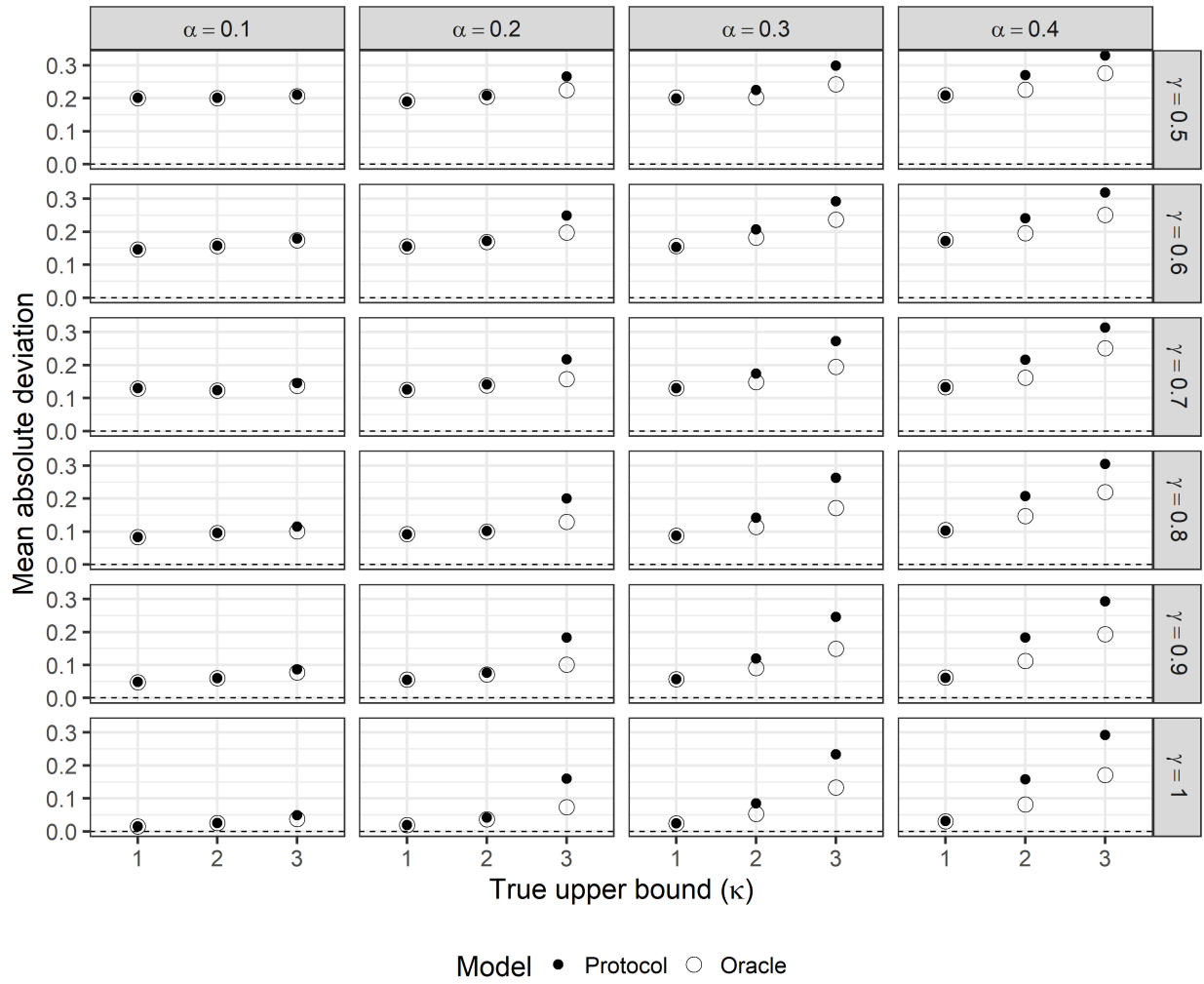

Figure B1: Bias for simulations with $\tau = 0.26$

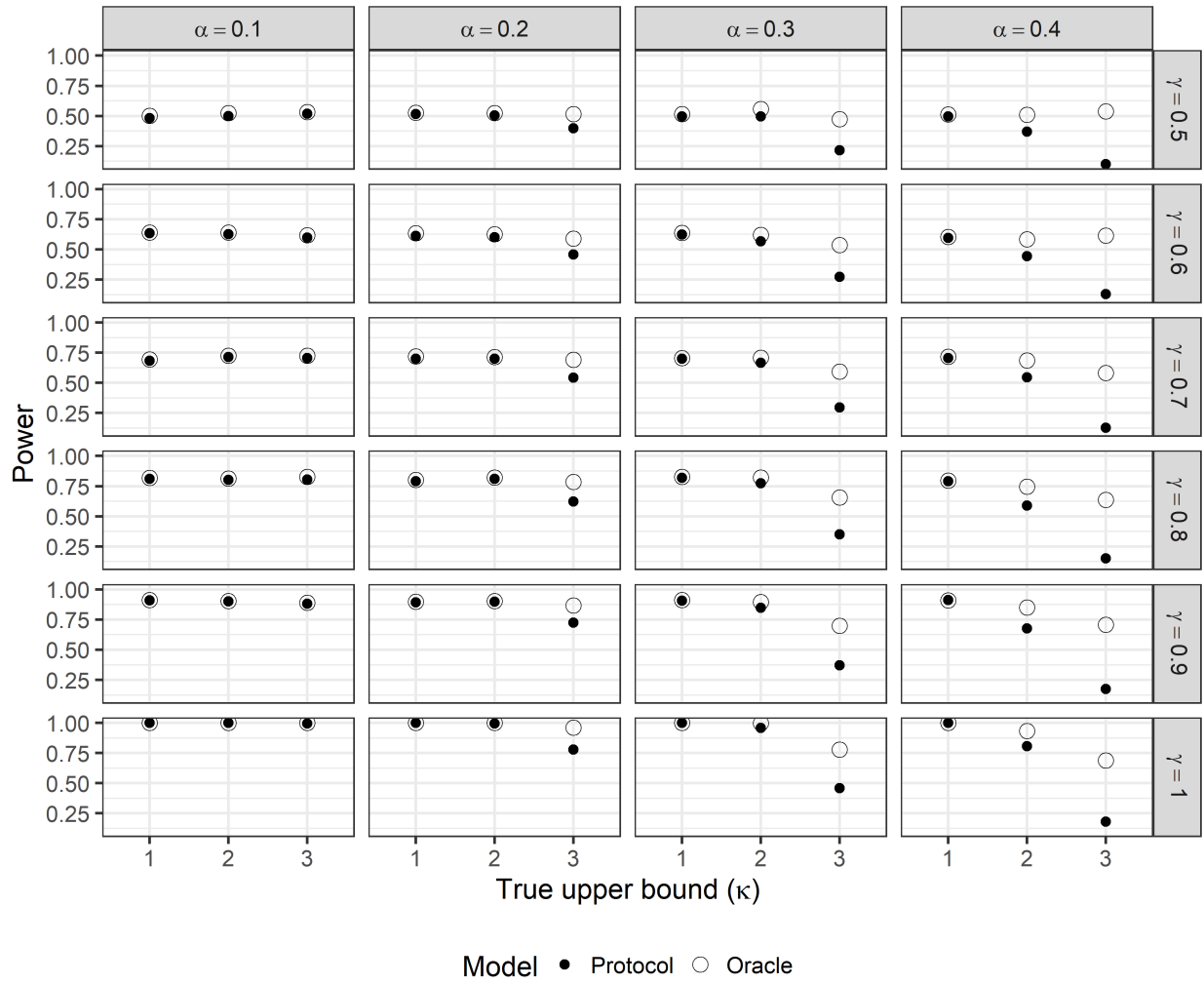Figure B2: Mean absolute deviation for simulations with $\tau = 0.26$

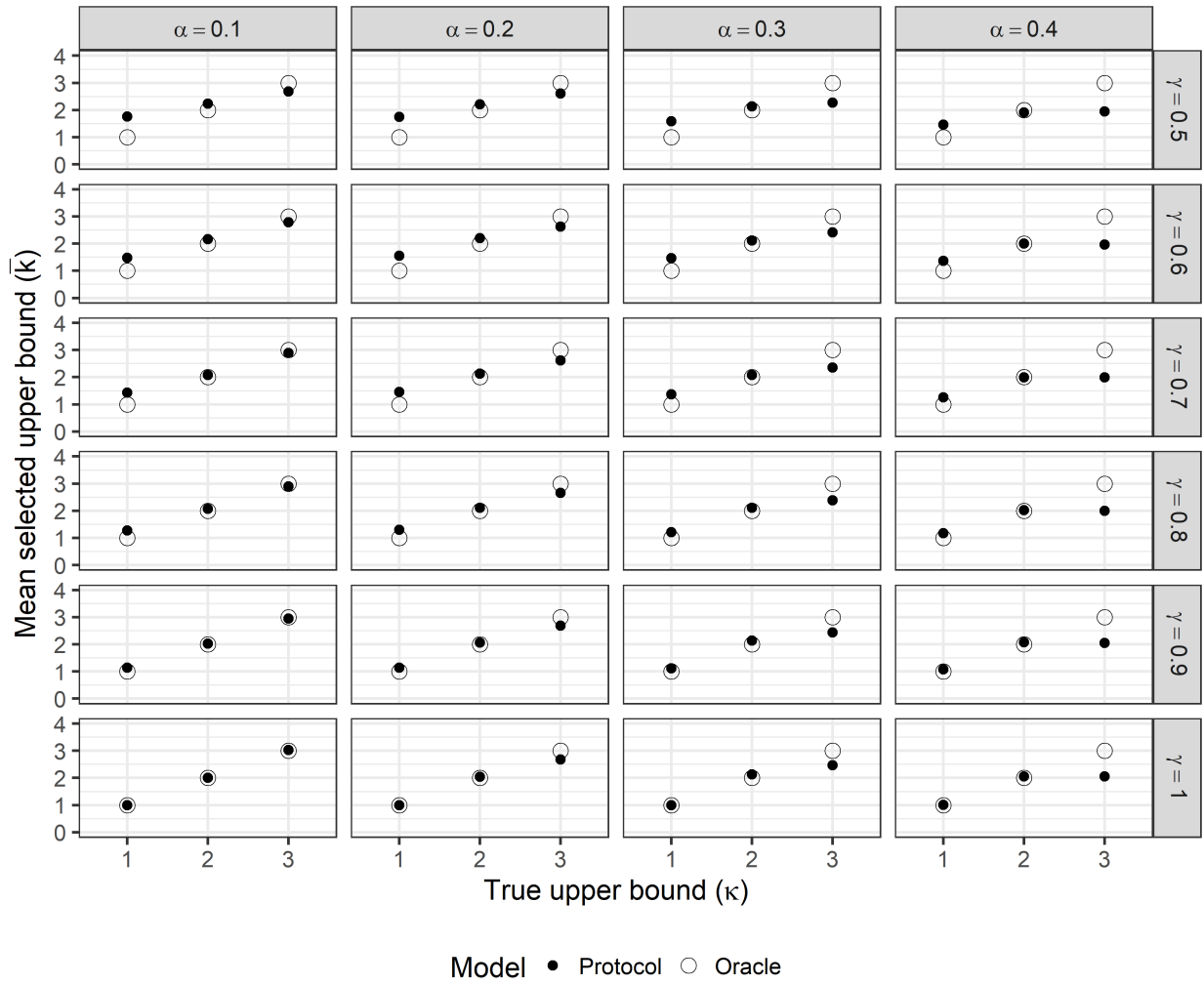**Figure B3: Power for simulations with $\tau = 0.26$**

Figure B4: Mean selected upper bound for simulations with $\tau = 0.26$
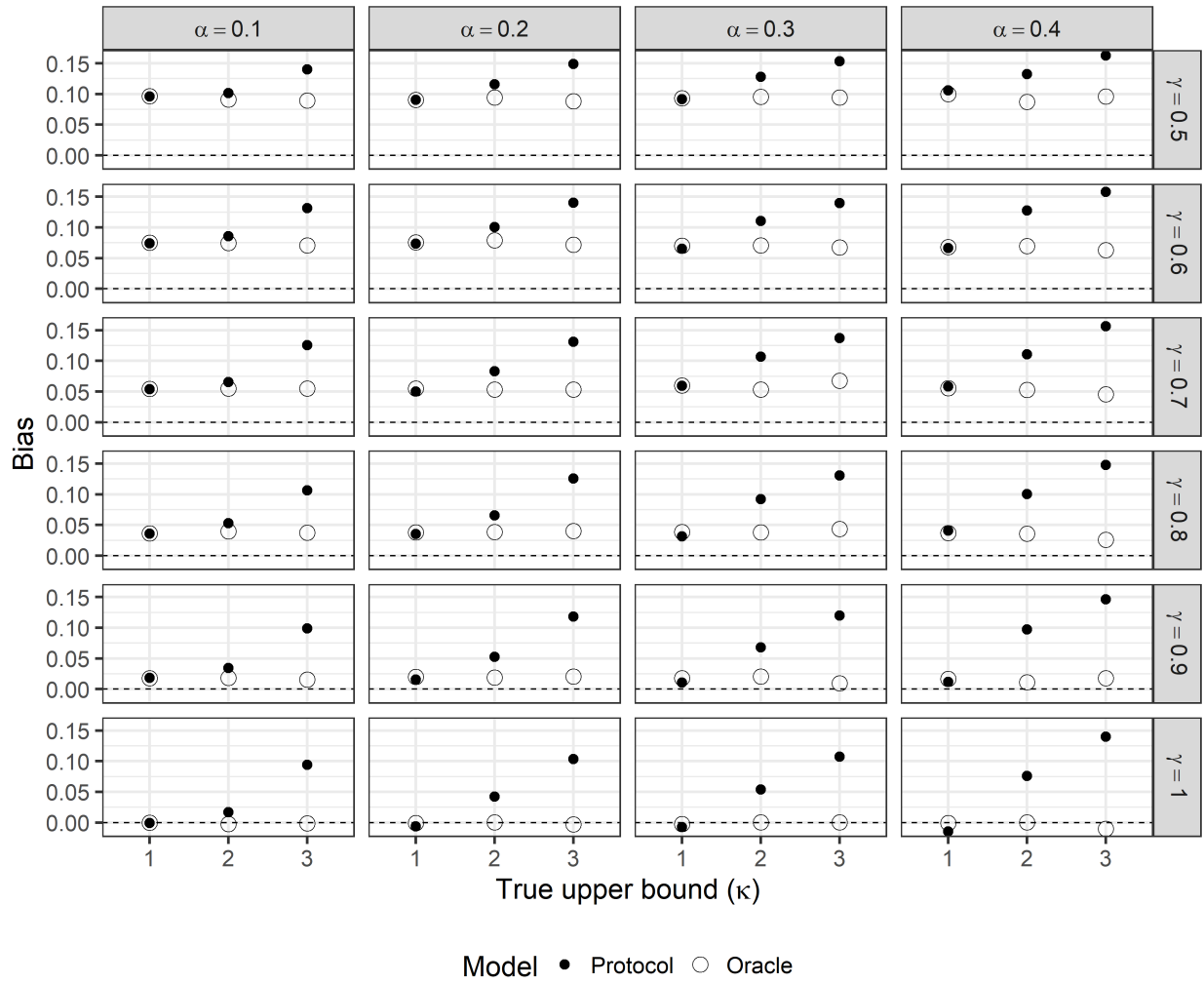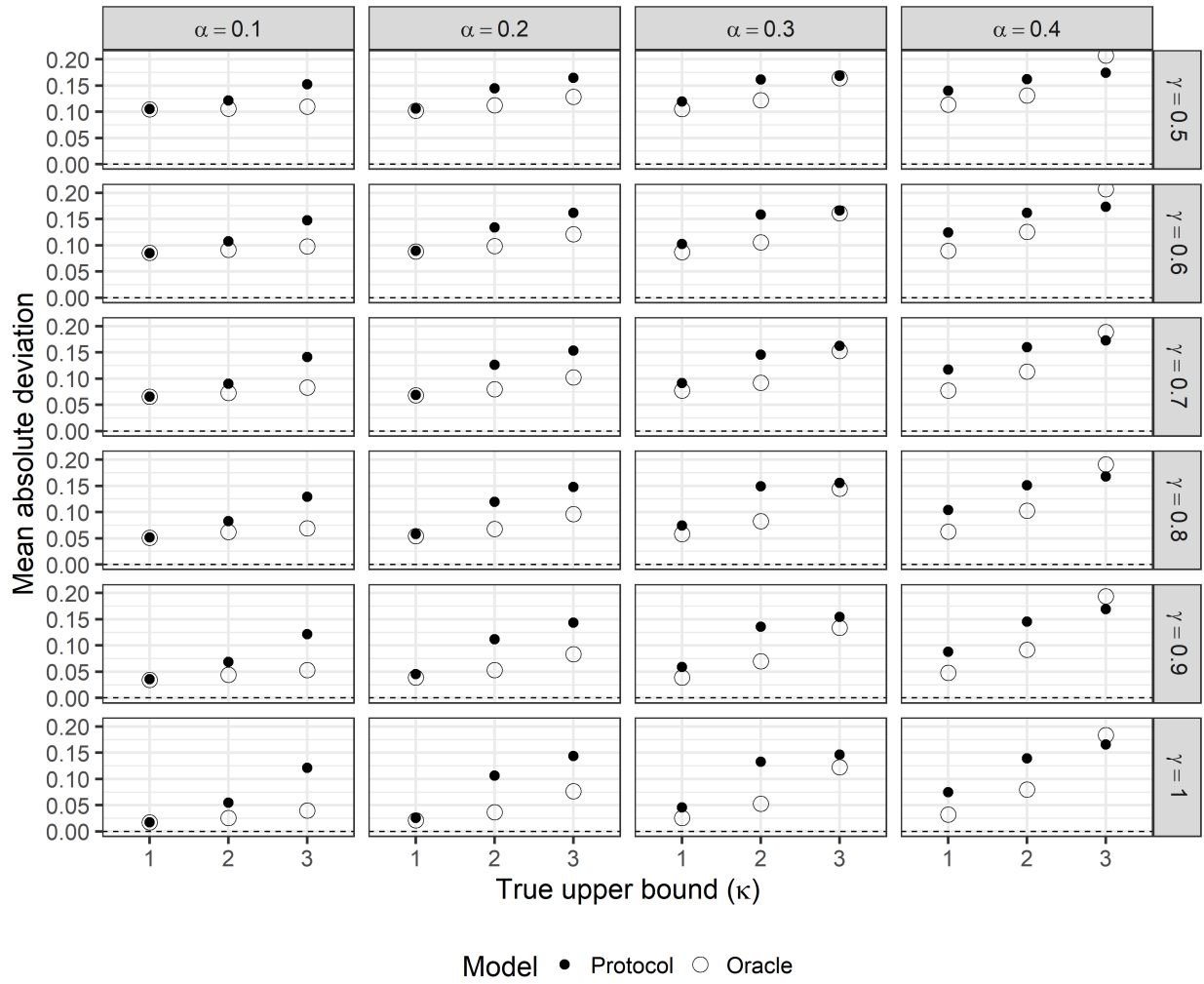
Figure B5: Bias for simulations with $\tau = 0.63$

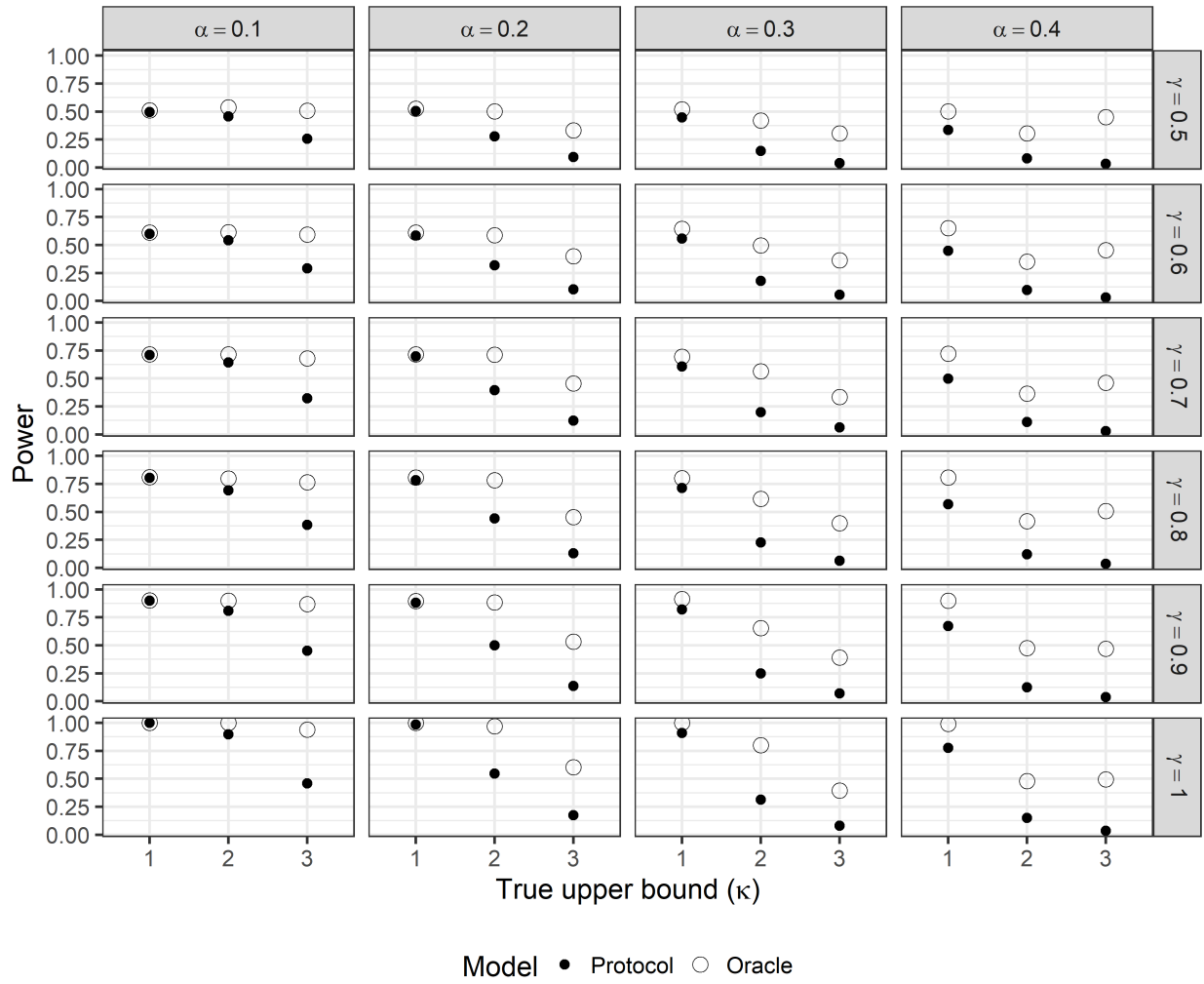Figure B6: Mean absolute deviation for simulations with $\tau = 0.63$

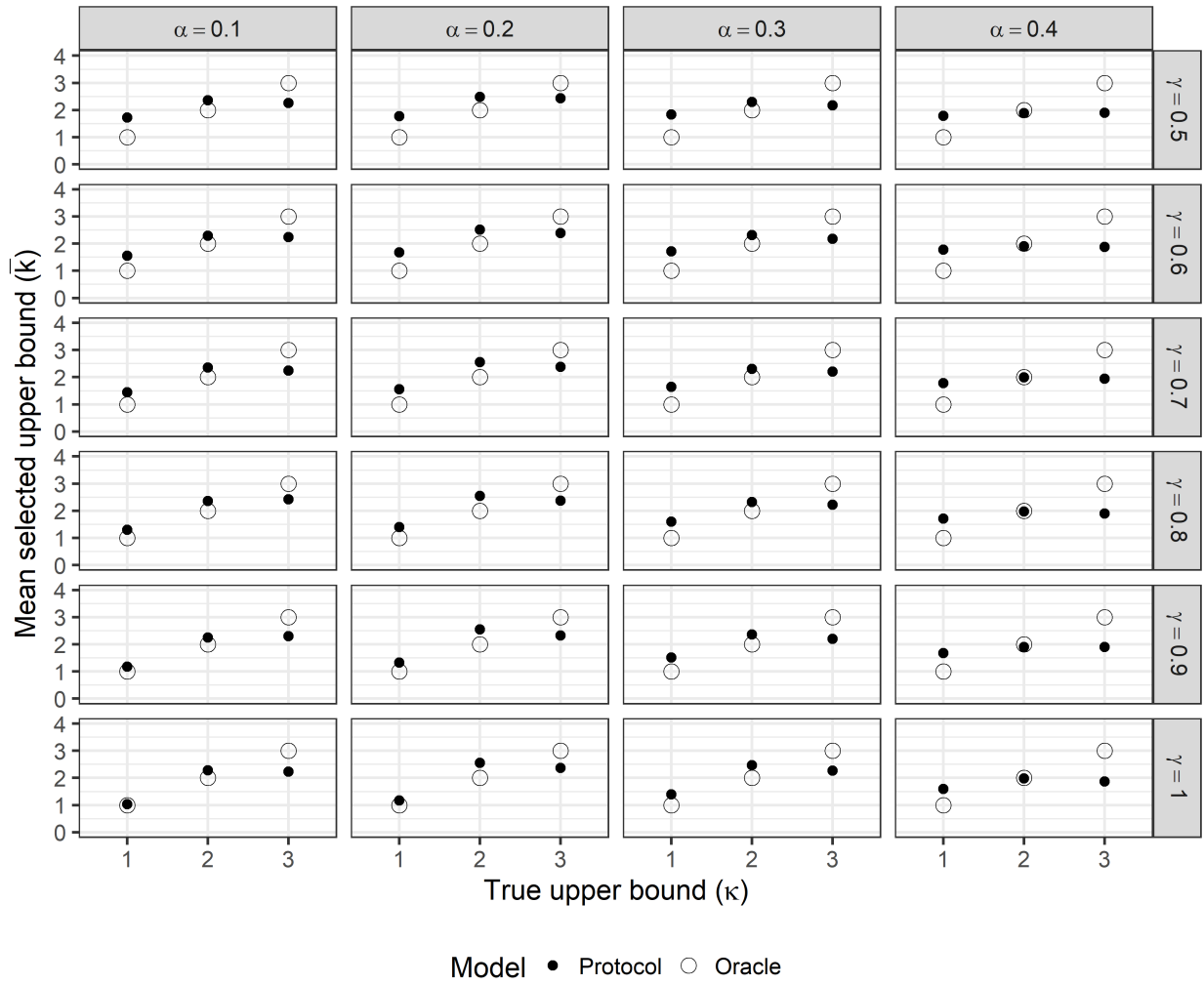**Figure B7: Power for simulations with $\tau = 0.63$**

Figure B8: Mean selected upper bound for simulations with $\tau = 0.63$